

REMARKS/ARGUMENTS**Claim Objections**

Examiner has made objections to some of the Claims. In response, Applicant has amended the appropriate claims. Please note Examiner has made numerous objections dealing with the subject of unnecessary blank spaces in the claims. In response, Applicant respectfully submits that there are no unnecessary blank spaces in the claims as filed and respectfully requests that Examiner withdraw those objections.

Double Patenting

Examiner has rejected Claims 1-41 under the judicially created doctrine of double patenting over Claims 1-19 of U.S. Patent No. 6,148,878 and Claims 1-30 of U.S. Patent No. 6,360,792. In response, Applicant has filed a Terminal Disclaimer to Obviate a Double Patenting Rejection Over a "Prior" Patent.

Claim Rejections - 35 USC 102

Examiner has rejected Claims 1-3, 9-11, 14, 15, 19-21, 25-27 and 33-35 under 35 USC 102(b) as being anticipated by Reich. Specifically, regarding Claim 1, Examiner states that Reich shows:

1) An automated storage and retrieval device for trays holding subject matter, comprising:

- A) a storage rack for storing a plurality of trays (Figure 4, stored Cassettes 12 containing Tubes 10 and Specimen Cups 11, which are stored on stage 13; Column 2, Lines 67-68, Column 3, Lines 22-41),
- B) at least one automated machine (Figure 33, Bracket Assembly 33 and related accessories; Column 3, Lines 22-41),
- C) a storage gantry for moving said plurality of trays between said storage rack and said at least one automated machine (Figure 4, Stage 13, Track 20, movements in horizontal directions 25 and 26, and vertical directions 23 and 24; Column 3, Lines 5 - 21), and
- D) at least one computer system programmed to control said storage gantry (Figure 3, Program Panel 160; Figure 14, Curve A; Column 10, Lines 13-18, Column 10, Lines 32-35).

In response Applicant has amended Claim 1 so that it now reads as follows:

1) An automated storage and retrieval device for trays holding subject matter, comprising:

- A) a storage rack for *vertically* storing a plurality of trays,

- B) at least one automated machine,
- C) a storage gantry for *vertical and horizontal* movement of said plurality of trays between said storage rack and said at least one automated machine, and
- D) at least one computer system programmed to control said storage gantry. (emphasis added)

Reich does not show a storage rack for vertical storage of trays. Instead, in Reich cassettes 12 containing tubes 10 and specimen cups 11 are stored on a horizontal platform (stage 13). Of course, horizontal storage is not nearly as effective as vertical storage when storing a large plurality of trays. The amount of available horizontal space is quickly depleted when items are not stored vertically but are instead placed on a horizontal platform, such as Reich's.

Reich does not show a storage gantry for vertical and horizontal movement of trays. Rather, Reich shows a conveying system (track 20) that only horizontally indexes cassettes 12 sequentially in a clockwise fashion so that they can be positioned in turn under dispensing/aspirating head 21. Applicant's storage gantry is far superior to Reich's conveying system. Applicant's storage gantry can independently access any tray vertically stored in Applicant's storage rack. The storage gantry can then transfer the tray to the automated machine and then back to its spot in the storage rack without disturbing the other trays. In contrast, Reich's track 20 is capable only of horizontal movement. Moreover, one of Reich's cassettes cannot be independently moved or positioned without moving or positioning the other cassettes.

Claim 1 should now therefore be allowable. Independent Claims 14, 25, 38, 39 and 40 have been similarly amended and should likewise now be allowable. All other claims are dependent on Claims 1, 14, 25, 38, 39 and 40 and should all also now be allowable for the reasons stated above.

Claim Rejections – 35 USC 103

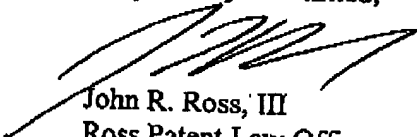
Examiner has rejected Claims 4, 12, 13, 16, 22, 23, 28, 36 and 37-40 under 35 USC 103(a) as being unpatentable over Reich in view of other references. Applicant

respectfully submits that these claims as amended should now be allowable for the reasons stated above.

Conclusion

Thus, for all the reasons given above, this application, as the claims are presently limited, defines a novel, patentable, and truly valuable invention. Hence allowance of all outstanding claims in this application is respectfully submitted to be proper and is respectfully solicited.

Respectfully Submitted,



John R. Ross, III
Ross Patent Law Office
Regis. No. 43060
PO Box 2138
Del Mar, CA 92014
Phone: 858-755-3122
Fax: 858-755-3122